Applications for Laboratory Column Tests in Evaluating Arsenic Adsorption Media

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The application of two types of column tests will be described. First, rapid small scale column tests (RSSCTs) have been conducted on a wide range of water qualities for approximately 20 different adsorbent media. These experiments used small-sized media, crushed from full-scale media. Apparatus set-up, practical limitations, and methods of data analysis will be described. Second, "incipient" column tests with full-sized media (not crushed) have been conducted. These tests are even shorter in duration (8 hours) than RSSCTs and may offer certain advantages to vendors for media evaluation or development of new media.

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Biographical sketch:
Paul Westerhoff has been in Department of Civil and Environmental Engineering at Arizona State University since 1995, and is currently an associate professor. He obtained a Ph.D. from the University of Colorado at Boulder, a MS from University of Massachusetts and BS from Lehigh University. His teaching and research interests are related to water quality, water treatment, and water distribution. He belongs to AWWA, IOA, ACS, ASEEP, and AWPCA. He serves on the water reuse, particulate, taste and odor, and university student affairs AWWA committees. He was awarded the 1999 JAWWA Best Paper Award. His current research includes investigating NOM characteristics, oxo-anion reactions/removal, oxidant reactions, assessing/controlling/treating sources of tastes and odors, and wasterwater reuse.